

In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-10. (Canceled)

11. (New) A method of providing secure transmission of data from a touch screen to a financial network, comprising the steps of:

a) displaying a prompt to a user to enter data using the touch screen with a display associated with the touch screen;

5 b) determining x-axis and y-axis coordinate values corresponding to each area touched by the user on the touch screen;

c) detecting the pressure of the user's touch x-axis and y-axis coordinate values corresponding to each area touched by the user on the touch screen and generating a z-axis coordinate value;

10 d) transferring the x-axis, y-axis and z-axis coordinate data corresponding to each area touched by the user on the touch screen directly to an encryption/decryption processor such that coordinate data corresponding all data entered by the user is transferred to the encryption/decryption processor;

e) encrypting the coordinate data corresponding to each area touched by the user on
15 the touch screen with the encryption/decryption processor wherein the encryption/decryption processor uses an encryption algorithm to encrypt the data;

f) transferring the encrypted data corresponding to each area touched by the user on the touch screen to a second processor in encrypted form wherein all data entered by the user is encrypted and transferred to the second processor;

20 g) accessing the encryption algorithm with the second processor;

h) decrypting the encrypted transferred data corresponding to each area touched on the touch screen by the user with the second processor using the encryption algorithm;

i) identifying sensitive information in the decrypted data with the second processor;

j) separating the sensitive information from the nonsensitive information with the

25 second processor;

k) using the nonsensitive data to carry out an application program with the second processor and provide display information to the display associated with the touch screen, the display operatively connected to the second processor to display prompts to the user;

l) encrypting the sensitive data to maintain security thereof with the second
30 processor;

m) determining a data format with the second processor for an electronic transaction message between the second processor and a network transaction server that includes selected data fields for information required to conduct a transaction, the electronic transaction message including first and second message segments wherein the first message segment includes a data
35 field for a code that uniquely identifies a user device associated with the touch screen from other user devices connected to the financial network and the second message segment includes data fields necessary to transmit the information required to conduct a financial transaction and wherein the first message segment includes a data field for identifying the format of the second message segment;

40 n) using the sensitive information separated from the nonsensitive information to format an electronic transaction message with the second processor using the determined data format; and

o) transmitting the formatted electronic transaction message including the sensitive information from the second processor to a network transaction server.

12. (New) The method of Claim 11 further comprising storing encryption data for use in encrypting data in a memory coupled to the encryption/decryption processor, and further including accessing the memory with the encryption/decryption processor and the second processor to encrypt and decrypt data entered by a user of the touch screen.

13. (New) The method of Claim 12, wherein the memory is coupled by a bus only to the encryption/decryption processor and not by a bus directly to the second processor.

14. (New) The method of Claim 13 further comprising covering the encryption/decryption processor and the memory with a physical protection to prevent

unauthorized mechanical access to the encryption/decryption processor and to the memory.

15. (New) The method of Claim 11 further comprising separating a personal identification number as sensitive data.

16. (New) The method of Claim 11, further including using the touch sensitive screen with a kiosk for carrying out financial transactions.

17. (New) The method of Claim 16, further including using the touch sensitive screen by a user of the kiosk to purchase goods/services.

18. (New) A method of providing secure transmission of data from a touch screen to a financial network, comprising the steps of:

a) displaying a prompt to a user to enter data using the touch screen with a display associated with the touch screen;

5 b) transferring coordinate data corresponding to each area touched by the user on the touch screen directly to an encryption/decryption processor such that coordinate data corresponding to every area touched by the user is transferred to the encryption/decryption processor;

10 c) encrypting the coordinate data corresponding to each area touched by the user on the touch screen with the encryption/decryption processor wherein the encryption/decryption processor uses an encryption algorithm to encrypt the data;

d) transferring the encrypted data corresponding to each area touched by the user on the touch screen to a second processor in encrypted form wherein all data entered by the user is encrypted and transferred to the second processor;

15 e) accessing the encryption algorithm with the second processor;

f) decrypting the encrypted transferred data corresponding to each area touched on the touch screen by the user with the second processor using the encryption algorithm;

g) identifying sensitive information in the decrypted data with the second processor;

20 h) separating the sensitive information from the nonsensitive information in the decrypted data with the second processor;

i) using the nonsensitive data to carry out an application program with the second processor and displaying information on a display associated with the touch screen;

j) encrypting the sensitive data to maintain security thereof with the second processor;

25 k) determining a data format for an electronic transaction message between the second processor and a network transaction server that includes selected data fields for information required to conduct a transaction, the electronic transaction message including first and second message segments wherein the first message segment includes a data field for a code that uniquely identifies a user device associated with the touch screen from other user devices
30 connected to the financial network and the second message segment includes data fields necessary to transmit the information required to conduct a financial transaction wherein the first message segment includes a data field for identifying the format of the second message segment;

l) formatting the electronic transaction message with the second processor using the determined data format; and

35 m) transmitting the formatted electronic transaction message including the sensitive information from the second processor to a network transaction server.

19. (New) The method of Claim 18 further comprising accepting a payment in the form of one of currency, a credit card, debit card or smart card with the user device associated with the touch screen.

20. (New) The method of Claim 19 further comprising one of printing or displaying a code enabling a recipient to dispense with a second user device at location remote from the first user device a medium having inherent value corresponding to the payment whereby the recipient enters the code using a touch screen associated with the second user device.

21. (New) The method of Claim 20 further comprising performing a currency exchange rate calculation with the second processor.

22. (New) The method of Claim 20 wherein the payment is denominated in the legal tender of a first country and the medium having inherent value is a legal tender of a second

country different from the first country.

23. (New) The method of Claim 18 further comprising displaying a transaction fee using the display associated with the touch screen.

24. (New) The method of Claim 18 wherein the step of formatting the electronic transaction message with the second processor using the determined data format further comprises formatting an electronic transaction message having a first message segment including a device identification segment, an authorization segment and a service payload segment.

25. (New) The method of Claim 18 further comprising printing a receipt for the transaction with a printer associated with the user device.

26. (New) A method of providing secure transmission of data from a user device having a touch screen to a financial network comprising the steps of:

a) prompting a user to enter data using the touch screen with a display associated with the touch screen;

5 b) transferring coordinate data corresponding to each area touched by the user on the touch screen directly to an encryption/decryption processor such that coordinate data corresponding to every area touched by the user is transferred to the encryption/decryption processor;

10 c) encrypting the coordinate data corresponding to each area touched by the user on the touch screen with the encryption/decryption processor wherein the encryption/decryption processor uses an encryption algorithm to encrypt the data;

d) transferring the encrypted data corresponding to each area touched by the user on the touch screen to a second processor in encrypted form wherein all data entered by the user is encrypted and transferred to the second processor;

15 e) accessing a memory to obtain the encryption algorithm with the second processor, wherein the memory is accessed by the second processor via the encryption/decryption processor;

f) decrypting the encrypted transferred data corresponding to each area touched on

the touch screen by the user with the second processor using the encryption algorithm;

- 20 g) identifying sensitive information in the decrypted data with the second processor;
- h) separating the sensitive information from the nonsensitive information in the
decrypted data with the second processor;
- i) using the nonsensitive data to carry out an application program with the second
processor and provide display information to a display associated with the touch screen;
- 25 j) encrypting the sensitive data to maintain security thereof with the second
processor;
- k) determining a data format for an electronic transaction message between the
second processor and a network transaction server that includes selected data fields for
information required to conduct a transaction, the electronic transaction message including first
30 and second message segments wherein the first message segment includes a data field for a code
that uniquely identifies a user device associated with the touch screen from other user devices
connected to the financial network and the second message segment includes data fields
necessary to transmit the information required to conduct a financial transaction wherein the first
message segment includes a data field for identifying the format of the second message segment
35 wherein the format of the electronic transaction message is a selected based on the particular
type of transaction;
- l) formatting the electronic transaction message with the second processor using the
determined data format;
- m) transmitting the formatted electronic transaction message including the sensitive
40 information from the second processor to a network transaction server; and
- o) printing a receipt for the transaction with a printer associated with the user device.

5 27. (New) The system of Claim 26 wherein the message stored on the transaction
server further comprises a third message segment having a variable arrangement of data fields
selected from a plurality of predetermined data fields for different goods and service, the third
message segment including the data fields for information required to purchase a good or service
using the system.

28. (New) The method of Claim 26 wherein a data field of the second message

segment is formatted to store a code indicating currency as a chosen method of payment by the user.

29. (New) The method of Claim 26 wherein the second message segment includes a variable number of data fields as a function of the methods of payments allowed by the user device.

30. (New) The method of Claim 26 wherein a data field of the first message segment specifies one of a method of payments selected from a group consisting of ATM card, credit card, debit card, smart card or currency.